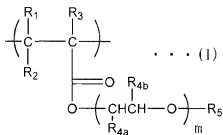


AMENDMENTS TO THE CLAIMS

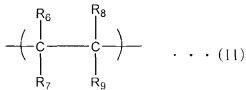
The following listing of claims replaces all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (original): A solid polymer electrolyte comprising an electrolyte salt, and a copolymer in which a block chain A containing a repeating unit represented by a formula (I) shown below:

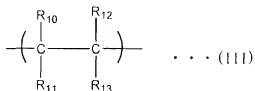


(wherein, R₁ to R₃ each represent, independently, a hydrogen atom or a hydrocarbon group of C1 to C10, R₁ and R₃ may be bonded together to form a ring, R_{4a} and R_{4b} each represent, independently, a hydrogen atom or a methyl group, R₅ represents a hydrogen atom, a hydrocarbon group, an acyl group, or a silyl group, m represents an integer from 2 to 100, and individual R_{4a} and R_{4b} groups are either identical or different), a block chain B containing a repeating unit represented by a formula (II) shown below:



(wherein, R₆ to R₈ each represent, independently, a hydrogen atom or a hydrocarbon group of C1 to C10, and R₉ represents an aryl group), and a block chain C are arranged in a sequence B, A, C.

Claim 2 (original): A solid polymer electrolyte according to claim 1, wherein said block chain C contains a repeating unit represented by a formula (III) shown below:



(wherein, R₁₀ to R₁₂ each represent, independently, a hydrogen atom or a hydrocarbon group of C1 to C10, and R₁₁ represents an aryl group or a heteroaryl group).

Claim 3 (previously presented): A solid polymer electrolyte according to claim 1, wherein said block chains A to C form a copolymer with a B-A-C bonding sequence.

Claim 4 (previously presented): A solid polymer electrolyte according to claim 1, wherein a degree of polymerization of a repeating unit represented by said formula (I) is at least 10.

Claim 5 (previously presented): A solid polymer electrolyte according to claim 1, wherein a degree of polymerization of a repeating unit represented by said formula (II) is at least 5.

Claim 6 (previously presented): A solid polymer electrolyte according to claim 2, wherein a degree of polymerization of a repeating unit represented by said formula (III) is at least 5.

Claim 7 (previously presented): A solid polymer electrolyte according to claim 1, wherein a value of m in said formula (I) is an integer from 5 to 100.

Claim 8 (previously presented): A solid polymer electrolyte according to claim 1, wherein a value of m in said formula (I) is an integer from 10 to 100.

Claim 9 (previously presented): A solid polymer electrolyte according to claim 2, wherein said group R_{13} in said formula (III) is an aryl group, and a degree of polymerization of a repeating unit represented by said formula (III) is at least 5.

Claim 10 (previously presented): A solid polymer electrolyte according to claim 1, wherein a molar ratio $((I)/((II)+C))$ between repeating units represented by said formula (I), and a combined total of repeating units represented by said formula (II) and repeating units within said block chain C is within a range from 1/30 to 30/1.

Claim 11 (previously presented): A solid polymer electrolyte according to claim 2, wherein a molar ratio $((I)/((II)+(III)))$ between repeating units represented by said formula (I), and a combined total of repeating units represented by said formula (II) and repeating units represented by said formula (III) is within a range from 1/30 to 30/1.

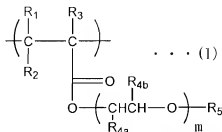
Claim 12 (previously presented): A solid polymer electrolyte according to claim 1, wherein a number average molecular weight of said copolymer is within a range from 5,000 to 1,000,000.

Claim 13 (previously presented): A solid polymer electrolyte according to claim 1, which exhibits a microphase separated structure.

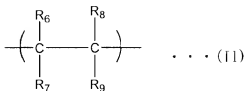
Claim 14 (previously presented): A solid polymer electrolyte according to claim 1, wherein said electrolyte salt is one or more materials selected from a group consisting of alkali metal salts, quaternary ammonium salts, quaternary phosphonium salts, transition metal salts, and protonic acids.

Claim 15 (previously presented): A solid polymer electrolyte according to claim 1, wherein said electrolyte salt is a lithium salt.

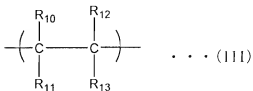
Claim 16 (original): A copolymer in which a block chain A containing a repeating unit represented by a formula (I) shown below:



(wherein, R₁ to R₃ each represent, independently, a hydrogen atom or a hydrocarbon group of C1 to C10, R₁ and R₃ may be bonded together to form a ring, R_{4a} and R_{4b} each represent, independently, a hydrogen atom or a methyl group, R₅ represents a hydrogen atom, a hydrocarbon group, an acyl group, or a silyl group, m represents an integer from 2 to 100, and individual R_{4a} and R_{4b} groups are either identical or different), a block chain B containing a repeating unit represented by a formula (II) shown below:



(wherein, R₆ to R₈ each represent, independently, a hydrogen atom or a hydrocarbon group of C1 to C10, and R₉ represents an aryl group), and a block chain C containing a repeating unit represented by a formula (III) shown below:



(wherein, R₁₀ to R₁₂ each represent, independently, a hydrogen atom or a hydrocarbon group of C1 to C10, and R₁₃ represents an aryl group or a heteroaryl group) are arranged in a sequence B, A, C.

Claim 17 (original): A copolymer according to claim 16, wherein said block chains A to C are bonded together in a B-A-C sequence.

Claim 18 (previously presented): A copolymer according to claim 16, wherein a degree of polymerization of a repeating unit represented by said formula (I) is at least 10.

Claim 19 (previously presented): A copolymer according to claim 16, wherein a degree of polymerization of a repeating unit represented by said formula (II) is at least 5.

Claim 20 (previously presented): A copolymer according to claim 16, wherein a degree of polymerization of a repeating unit represented by said formula (III) is at least 5.

Claim 21 (previously presented): A copolymer according to claim 16, wherein a value of m in said formula (I) is an integer from 5 to 100.

Claim 22 (previously presented): A copolymer according to claim 16, wherein a value of m in said formula (I) is an integer from 10 to 100.

Claim 23 (previously presented): A copolymer according to claim 16, wherein said group R_{13} in said formula (III) is an aryl group, and a degree of polymerization of a repeating unit represented by said formula (III) is at least 5.

Claim 24 (previously presented): A copolymer according to claim 16, wherein a molar ratio $((I)/(II)+(III))$ between repeating units represented by said formula (I), and a combined total of repeating units represented by said formula (II) and repeating units represented by said formula (III) is within a range from 1/30 to 30/1.

Claim 25 (previously presented): A copolymer according to claim 16, wherein a number average molecular weight of said copolymer is within a range from 5,000 to 1,000,000.

Claim 26 (previously presented): A copolymer according to claim 16, which exhibits a microphase separated structure.

Claim 27 (previously presented): A method of producing a copolymer according to claim 16, which utilizes a living radical polymerization in which a transition metal complex is used as a catalyst, and an organohalogen compound comprising 1 or more halogen atoms is used as an initiator.

Claims 28-29 (canceled).